The Golden Triangle of northwestern British Columbia
Stikinia (Stikine terrane), home to the Golden Triangle

British Columbia’s mineral endowment is intimately linked to its tectonic evolution.

Mineral deposits developed during breakup up of the supercontinent Rodinia, accretion of terranes to the western margin of Ancestral North America, and post-accretion deformation and magmatism.

Stikinia is a long-lived oceanic arc terrane that extends for about 1000 km along the length of the Canadian Cordillera. It hosts much of British Columbia’s gold, silver, and copper in porphyry, epithermal, and volcanic massive sulphide deposits. These deposits formed during the latest episodes of ocean arc activity and the following terrane amalgamation.

The Golden Triangle includes most of the major gold, silver and copper deposits in west-central Stikinia.
Enhanced infrastructure is encouraging exploration.

- Highway 37 is now paved between Stewart and Cassiar.
- The Northwest Transmission Line now extends to the Red Chris mine.
- Port facilities at Stewart are open.

Most deposits are related to the Hazelton Group and affiliated intrusions.
More than 150 mines have operated in the region since prospectors first arrived near the end of the 19th century. Important past-producing mines include Granduc, Eskay Creek, Anyox, Kitsault, Premier/Dilworth, and Snip. With the goal of reopening, both Premier/Dilworth and Snip are being intensively explored.

### Brucejack mine
(Pretium Resources Inc.)
- epithermal gold-silver
- began commercial production July 2017
  - 18.5 Mt at 14.6 g/t Au, 53.5 g/t Ag
  - VOK zone 16.4 Mt at 17.2 g/t Au and 15.0 g/t Ag;
  - West zone 4.9 Mt at 5.85 g/t Au and 267 g/t Ag
- current mine life to 2035

### Red Chris mine
(Imperial Metals Corporation)
- porphyry copper-gold
- began commercial production in 2015
- Proven and Probable Reserves, Feb. 2012
  - 301.6 Mt at 0.36% Cu and 0.27 g/t Au
  - 1.035 Bt at 0.35% Cu, 0.35 g/t Au and 1.14 g/t Ag
- current mine life to 2043
Proposed mines

The proposed mine projects listed below are considered reviewable under environmental assessment acts, have defined reserves and resources, and have at least submitted a project description to begin the environmental assessment process. Reserves below are Proven + Probable; Resources are Measured + Indicated.

**Galore Creek** (Galore Creek Mining Corporation)
- alkaic porphyry Au-Cu
- Reserves, Sept. 2011
  528 Mt at 0.59% Cu, 0.32 g/t Au, 6.02 g/t Ag
- Resource, Sept. 2011
  814.7 Mt at 0.50% Cu; 0.31 g/t Au, 5.2 g/t Ag

**Kitsault** (Allo corp Mining Inc.)
- porphyry Mo-Ag
- Reserves, Feb. 2014
  228.2 Mt at 0.083% Mo, 5.0 g/t Ag
  321.8 Mt at 0.071% Mo, 4.8 g/t Ag

**KSM** (Seabridge Gold Inc.)
- calc-alkalic porphyry Au-Cu-Ag-Mo
- Reserves, Feb. 2018
  2.198 Bt at 0.55 g/t Au, 0.21% Cu, 2.6 g/t Ag, 0.0043% Mo
- Resource, Feb. 2018
  2.925 Bt at 0.52 g/t Au, 0.21% Cu, 2.7 g/t Ag, 0.0055% Mo

**Red Mountain** (IDM Mining Ltd.)
- porphyry Au-Ag
- Reserves, June 2017
  1.953 Mt at 7.53 g/t Au, 21.9 g/t Ag
- Resource, June 2018
  2.771 Mt at 7.91 g/t Au, 22.75 g/t Ag

**Schaft Creek** (75% Teck Resources Limited, 25% Copper Fox Metals Inc.)
- calc-alkalic porphyry Cu-Mo-Au
- Reserves, Jan. 2013
  940.8 Mt at 0.27% Cu, 0.018% Mo, 0.19 g/t Au, 1.72 g/t Ag
- Resource, Jan. 2013
  1.229 Bt at 0.26% Cu, 0.017% Mo, 0.19 g/t Au, 1.69 g/t Ag

Drilling at KSM.
With four deposits (Kerr, Sulphurets, Mitchell, Iron Cap), KSM may be the largest undeveloped copper-gold camp in the world (by reserves).
Selected 2017 exploration project updates

With Indicated or Inferred Resource

**Dolly Varden** (Dolly Varden Silver Corporation)
- Kuroko massive sulphide; Ag, Zn
- Indicated, Aug. 2015
  3.073 Mt at 321.6 g/t Ag
- Indicated, Aug. 2015
  3.073 Mt at 321.6 g/t Ag
- Inferred, Aug. 2015
  898,500 t at 373.3 g/t Ag
- 15,700 m diamond drilling in 2017
- [https://www.dollyvardensilver.com/](https://www.dollyvardensilver.com/)

**Homestake Ridge** (Auryn Resources Inc.)
- epithermal vein Au, Ag, Cu
- Indicated, Sept. 2017
  0.624 Mt at 6.25 g/t Au, 47.9 g/t Ag, 0.18% Cu
- Inferred, Sept 2017
  7.245 Mt at 4.00 g/t Au, 90.9 g/t Ag, 0.11% Cu
- 14,850 m diamond drilling in 2017

**GJ** (Skeena Resources Limited)
- calc-alkalic porphyry Cu-Ag
- GJ Donnelly Indicated, Apr. 2017
  215.2 Mt at 0.26% Cu, 0.31 g/t Au, 1.9 g/t Ag
- GJ Donnelly Inferred, Apr. 2017
  28.3 Mt at 0.14% Cu, 0.31 g/t Au, 1.8 g/t Ag
- Spectrum Indicated, Apr. 2017
  31.2 Mt at 0.10% Cu, 0.94 g/t Au, 2.6 g/t Ag
- Spectrum Inferred, Apr. 2017
  29.8 Mt at 0.12% Cu, 0.47 g/t Au, 1.4 g/t Ag

**North ROK** (Colorado Resources Ltd.)
- porphyry Cu-Ag
- Inferred, Jan. 2014
  142.3 Mt 0.22% Cu, 0.26 g/t Au
- 2,530 m diamond drilling in 2017

**Premier/Dilworth** (Ascot Resources Ltd.)
- quartz vein Au, Ag (past producer)
- Indicated, April 2018
  1.21 Mt 7.02 g/t Au, 30.6 g/t Ag
- Inferred, April 2018
  1.64 Mt 6.01 g/t Au, 24.9 g/t Ag
- 118,800 m diamond drilling in 2017
- [https://www.ascotgold.com/](https://www.ascotgold.com/)

The British Columbia Geological Survey publishes an annual overview of exploration each January.
E&L (Garibaldi Resources Corp.)
• tholeiitic intrusion; Ni, Cu, Pt, Ag
• 3,670 m diamond drilling in 2017
• http://www.garibaldiresources.com/s/Home.asp

Forrest Kerr (Aben Resources Ltd.)
• vein; Au, Ag, Cu
• 2,445 m diamond drilling in 2017
• https://www.abenresources.com/projects/gold-projects/forrest-kerr-gold-project-bc/

Hank (Golden Ridge Resources Ltd.)
• epithermal vein Au, Ag; porphyry Cu-Ag
• 3,975 m diamond drilling in 2017
• https://www.goldenridgeresources.com/projects/hank-au-ag-project/

Iskut (Seabridge Gold Inc.)
• calc-alkalic porphyry Au, Ag, Cu
• 4,460 m diamond drilling in 2017
• http://seabridgegold.net/iskut.php

KSP (Colorado Resources Ltd.)
• calc-alkalic porphyry Au, Cu
• 11,825 m diamond drilling in 2017
• https://www.coloradoresources.com/projects/bc-properties/ksp-property/

Red Cliff (65% Decade Resources Ltd., 35% Mountain Boy Minerals Ltd.)
• polymetallic veins; Au, Cu, Pb, Zn
• https://decaderesources.ca/

Snip (Skeena Resources Limited)
• quartz vein Au, Ag (past producer)
• 9,000 m underground diamond drilling in 2017
• https://www.skeenaresources.com/projects/snip

Tatogga (GT Gold Corp.)
• epithermal vein, porphyry Au, Ag, Cu
• 1,527 m RC drilling and 17,707 m diamond drilling in 2017
• http://www.gtgoldcorp.ca/projects/tatogga/

Treaty Creek (60% Tudor Gold Corp, 20% Teuton Resources Corp., 20% American Creek Resources Ltd.)
• epithermal vein, Au, Ag
• 13,722 m diamond drilling in 2017
• http://www.tudor-gold.com/projects/treaty-creek/

Tatogga project. Visible gold in drill core from the Saddle South grassroots discovery, which was awarded the Mines and Money ‘Exploration Discovery Award’.

Forrest Kerr project, drill set up.
Brucejack mine, first gold pour, June 2017. Courtesy of Pretium Resources Inc.